

IN THE SPECIFICATION

Please amend the title of the invention as follows:

SUB-PICOTESLAAN APPARATUS FOR MEASURING MAGNETIC FIELDS
DETECTOR USING A SUPERCONDUCTING QUANTUM INTERFERENCE DEVICE

Please amend the abstract of the disclosure as follows:

An instrument for measuring sub-pico Tesla magnetic fields using a superconducting quantum interference device (SQUID) inductively coupled to an unshielded gradiometer includes a filter for filtering magnetically- and electrically coupled radio frequency interference (RFI) away from the SQUID. This RFI is principally coupled to the SQUID via the unshielded gradiometer. The filter circuit includes a resistor-capacitor (RC) combination interconnected to first and second terminals so that it is parallel to both an input coil of the SQUID and the gradiometer. In addition, a shielding enclosure is used to electromagnetically shield the filter circuit from the SQUID, and a method is employed to increase the impedance between the input coil and the SQUID without diminishing the overall sensitivity of the instrument.